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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LOTT JOHNSON

Appeal 2009-009156
Application 10/820,578
Technology Center 3600

Before: LINDA E. HORNER, WILLIAM F. PATE III, and
KEN B. BARRETT, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Lott Johnson (Appellant) seeks our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1-15 and 18-21, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM-IN-PART.

THE INVENTION

Appellant's claimed invention relates to an automatic door latching assembly for unlocking the door of a delivery vehicle. Spec. 1:1-2. Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A vacuum actuated automatic door latching assembly for unlocking a door of a delivery vehicle, comprising:

a. a latch operatively associated with the door for latching the door, the latch movable between the lock and unlocked positions;

b. a pneumatic actuator operatively associated with the latch for causing the latch to move between the locked and unlocked positions;

c. a vacuum line connected to the pneumatic actuator and adapted to connect to a vacuum source associated with the vehicle;

d. a control valve disposed between the vacuum source and the pneumatic actuator for controlling the activation of the pneumatic actuator; and

e. a biasing device engaging the door and biasing the door towards an open position.

THE REJECTIONS

Appellant seeks review of the following decisions by the Examiner:

1. Rejection of claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as unpatentable over Lenz (US 3,016,968) and Garcia (US 4,170,374).
2. Rejection of claim 9 under 35 U.S.C. § 103(a) as unpatentable over Lenz, Garcia, and Higbie (US 2,801,309).

3. Rejection of claims 1-8, 10-15, and 18-20 under 35 U.S.C. § 103(a) as unpatentable over Garcia and Lenz.
4. Rejection of claims 9 and 21 under 35 U.S.C. § 103(a) as unpatentable over Garcia, Lenz, and Higbie.

ANALYSIS

Rejection of claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as unpatentable over Lenz and Garcia

Claims 1-4 and 6

Appellant argues claims 1-4 and 6 as a group. Br. 6-7. We select independent claim 1 as the representative claim, and claims 2-4 and 6 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellant asserts that the rationale for the proposed modification to incorporate Garcia's biasing feature into Lenz's device is inadequate. Thus, the issue before us is whether the proposed combination is based upon a sufficient reason with a rational underpinning to explain why a person of ordinary skill in the art would have incorporated Garcia's biasing feature into Lenz's device.

The Examiner concluded it would have been obvious to incorporate Garcia's biasing feature into Lenz's device "in order to bias the door to an open position, such that it decreases the amount of work needed to open the door." Ans. 4; *see also* Office Action dated January 25, 2008, page 3. The Examiner elaborated, and we agree, that because work is a product of force and distance, biasing the door to an open position performs a portion of the work required to fully open the door, thus reducing the work necessary to open the door from the biased position to the fully open position. Ans. 11-12. We find this reasoning to be based on a rational underpinning.

In the Response to Arguments section of the Office Action from which this appeal is taken (Office Action dated January 25, 2008, page 11), the Examiner additionally commented that another reason to make the proposed modification was to “lessen the chance the user would squish their fingers between the lid and the body panel.” Appellant argues that this reasoning has no factual support. Br. 6. Because the Examiner relies on the reduction of work reasoning in both the Office Action from which this appeal is taken and in the Answer, and because we find this reasoning to be based on a rational underpinning, we find the Appellant’s argument unconvincing because it does not address the reduction of work rationale relied upon as the basis for the conclusion of obviousness. Claims 2-4 and 6 fall with independent claim 1.

Claims 7 and 8

Appellant argues that the Examiner erred in finding that Garcia discloses a spring that extends between a stop disposed on a door and the area adjacent the door as called for in claim 7 (Br. 7-8). The issue before us is whether Garcia discloses a spring positioned as called for in claim 7. We look to the claim and then to the prior art.

Claim 7 depends from claim 6, which depends in turn from independent claim 1. Claim 7 recites that “the spring is adapted to extend between a stop disposed on the door and an area adjacent the door.” Appellant’s Specification describes stop 64 as secured to door 18 so that when door 18 is closed, spring 54 exerts a certain amount of opening force against stop 64. Spec. 6:12-16, 20-25; fig. 2. The word “extend” is commonly understood to mean “to lay out at full length; ‘[example] with his body *extended* on the ground.’” WEBSTER’S NEW UNIVERSAL UNABRIDGED DICTIONARY (Deluxe 2d ed. 1983) (“extend,” v.t., definition 1). The word

“between” is commonly understood to mean “in or through the space that separates two things.” *Id.* (“between,” prep., definition 1). The context of claim 7 is that the spring must extend between two defined points (the stop on a door and an area adjacent to the door). Taking into account the ordinary meaning of words in the claim limitation and the description of the invention provided in Appellant’s Specification, a person having ordinary skill in the art would understand claim 7 to call for the spring to lay out the full length of the space that separates the stop and an area adjacent the door.

The Examiner’s finding that Garcia’s spring meets the limitation of claim 7 is based on the Examiner’s interpretation of claim 7 as not requiring direct contact between the spring and the door or an area adjacent to the door. Ans. 12. Garcia’s rubber boot 50 lies between spring 54 and leg 74 (a stop on the door), such that there is no direct contact between Garcia’s spring 54 and the door. Garcia, fig. 2 and col. 4, ll. 37-44 (describing that during closing movement of door 20, “leg 74 engages the rubber boot 50 and compresses spring 54.”). We disagree with the Examiner’s claim construction that the spring need only reach to an intervening point (rubber boot 50) because our claim construction requires that the spring must lay out the full length of the space that separates the stop and an area adjacent the door.

The Examiner also interprets the phrase “adapted to” to require only that the spring be able to perform the function, and thus “does not constitute a limitation in any patentable sense.” Ans. 12 (citing for support to *In re Hutchinson*, 154 F.2d 135 (CCPA 1946)). We find *Hutchinson* inapplicable to the facts of the case at hand. In *Hutchinson*, the claim at issue recited in the preamble, “an article of manufacture, *adapted for use* in the fabrication of a metal template.” *Id.* at 137 (emphasis added). The court in *Hutchinson*

concluded that this introductory clause did not constitute a limitation in any patentable sense. *Id.* at 138. *Hutchinson* is inapplicable to the facts of this case because the phrase “adapted for use in the fabrication of a metal template” was a statement of intended use appearing in the preamble of the claim, whereas the phrase “adapted to extend between a stop disposed on the door and an area adjacent the door” is a structural limitation appearing in the body of the claim. Even were we to accept the Examiner’s claim construction (that claim 7 requires the spring only to be capable of performing the function of extending between a stop and an area adjacent a stop), the rejection is inadequate in that Examiner has made no finding that Garcia’s coil spring 27 is capable of performing such function.

Given that Garcia’s spring (54) lays out from to an area adjacent the door (platform 42) to rubber boot 50, stopping before the spring (54) reaches a stop disclosed on a door (leg 74), we find that Garcia’s spring (54) does not lay out the full length of the space that separates the stop (leg 74) and an area adjacent the door (platform 42) as called for in claim 7. Because claim 8 depends from claim 7, and therefore contains all the limitations of claim 7, the rejection of claim 8 is also in error.

Rejection of claim 9 under 35 U.S.C. § 103(a) as unpatentable over Lenz, Garcia, and Higbie

Appellant argues that Higbie does not disclose a spring fixed to a threaded bolt. Br. 10. The issue presented for our consideration is whether Higbie discloses a spring fixed to a threaded bolt that extends at least partially through a sleeve as called for in claim 9.

Higbie discloses a door switch assembly comprised of a grounding screw 13 having external threads on cylindrical body portion 17 that is

threadably received in a threaded bore 12 in the surface 11 of an automobile frame 10. Higbie, col. 1, ll. 16-20; col. 2, ll. 7-12; 16-18; fig. 1. Thus, the Examiner's finding that Higbie's threaded bore 12 is an elongated sleeve "threadably secured to the frame via screw threads" (Ans. 5) is incorrect because threaded bore 12 is not secured to frame 10. Rather, threaded bore 12 is an opening within frame 10. As such, threaded bore 12 cannot be the "sleeve" of claim 9. Thus, Appellant is correct that Higbie does not disclose a spring fixed to a threaded bolt that extends at least partially through a sleeve.

Rejection of claims 1-8, 10-15, and 18-20 under 35 U.S.C. § 103(a) as unpatentable over Garcia and Lenz

Claims 1-6, 10-15, and 18-20

In an alternate rejection of these claims, the Examiner found that Garcia discloses the invention substantially as set out in the rejected claims except for the latch assembly being vacuum actuated. The Examiner found that Garcia's electrical actuator and Lenz's vacuum actuator are each methods for latching an access door to a load compartment, and concluded that it would have been obvious to a person of ordinary skill in the art "to substitute one method for the other to achieve the predictable result of pneumatically actuating the latch assembly by a vacuum actuation assembly." Ans. 5-7.

Appellant argues claims 1-6, 10-15, and 18-20 as a group. Br. 5-7. We select independent claim 1 as the representative claim, and claims 2-6,

10-15, and 18-20 stand or fall with claim 1.² See 37 C.F.R.

§ 41.37(c)(1)(vii). Appellant argues that Garcia specifically teaches against using vacuum operated latching mechanisms so that a person of ordinary skill in the art would not have been motivated to incorporate Lenz's vacuum source into Garcia's latching mechanism. Br. 12 (citing to Garcia col. 1, ll. 30-48). Thus, the issue before us is whether the Garcia teaches away from incorporating Lenz's vacuum actuator into Garcia's device in place of Garcia's electrical actuator.

We find that Garcia does not teach away from using vacuum operated latching mechanisms. Garcia discloses a vehicle body closure latch that is remotely powered. Garcia, col. 1, ll. 5-6. Garcia discloses that in the prior art it was known to use remote releases that incorporate a vacuum operated motor or an electric motor. Garcia, col. 1, ll. 30-38. Garcia discloses that one of the difficulties with prior art devices of this type is "that the supplemental mechanical operator for the latch mechanism is rather awkward and usually requires the electrically operable mechanism to be reset after the closure has been mechanically opened." Garcia, col. 1, ll. 43-48. In other words, Garcia discloses the problem with some prior art devices was that the supplemental mechanical operator for the latch mechanism was rather awkward and usually had to be reset after the closure had been mechanically opened.

A person of ordinary skill in the art would recognize that the vacuum operated motor was not the problem; rather, the supplemental mechanical operator for the latch mechanism that was used in conjunction with the

² Appellant's argument relates to the vacuum-operated latching mechanism limitation. Independent claims 1 and 10 each call for a vacuum line and a vacuum source.

vacuum operated motor (or electric motor) was the problem. We find that a person of ordinary skill in the art, knowing Garcia's disclosure relating to the problem associated with supplemental mechanical operators, would not be led away from a device that includes a vacuum source for actuation such as used by Appellant in claim 1. *In re Haruna*, 249 F.3d 1327, 1335 (Fed. Cir. 2001) ("A reference may be said to teach away when a person of ordinary skill, upon reading the reference, ... would be led in a direction divergent from the path that was taken by the applicant." (citations omitted)). Therefore, the proposed combination is based upon sufficient reason with rational underpinning to explain why a person of ordinary skill in the art would have incorporated Lenz's vacuum actuator into Garcia's device in place of Garcia's electrical actuator. Claims 2-6, 10-15, and 18-20 fall with claim 1.

Claims 7 and 8

The Examiner found that Garcia discloses a spring that extends between a stop disposed on a door and the area adjacent the door as called for in claims 7 and 8.³ Ans. 6. For the reasons explained in the analysis of claims 7 and 8 in the first rejection, *supra*, this finding is in error.

³ Although this rejection is worded as Garcia in view of Lenz, instead of Lenz in view of Garcia (as in the first and second rejections), the rejection contains the same finding related to this limitation.

Rejection of claims 9 and 21 under 35 U.S.C. § 103(a) as unpatentable over Lenz, Garcia, and Higbie

Claims 9 and 21⁴ each call for a spring at least partially contained within a sleeve. This rejection is in error for the same reasons explained in the analysis of claim 9 over Garcia, Lenz and Higbie, *supra*.

CONCLUSIONS

The proposed combination of Lenz and Garcia is based upon a sufficient reason with a rational underpinning to explain why a person of ordinary skill in the art would have incorporated Garcia's biasing feature into Lenz's device.

Garcia does not disclose a spring that extends between a stop disposed on a door and the area adjacent the door as called for in claim 7.

The Examiner has failed to show that Higbie discloses a spring fixed to a threaded bolt that extends at least partially through a sleeve.

Garcia does not teach away from incorporating Lenz's vacuum actuator into Garcia's device in place of Garcia's electrical actuator.

DECISION

We AFFIRM the Examiner's decision to reject claims 1-4 and 6 under 35 U.S.C. § 103(a) as unpatentable over Lenz and Garcia.

We REVERSE the Examiner's decision to reject claims 7 and 8 under 35 U.S.C. § 103(a) as unpatentable over Lenz and Garcia.

We REVERSE the Examiner's decision to reject claim 9 under 35 U.S.C. § 103(a) as unpatentable over Lenz, Garcia, and Higbie.

⁴ Claim 21 depends from independent claim 10.

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We AFFIRM the Examiner's decision to reject claims 1-6, 10-15, and 18-20 under 35 U.S.C. § 103(a) as unpatentable over Garcia and Lenz.

We REVERSE the Examiner's decision to reject claims 7 and 8 under 35 U.S.C. § 103(a) as unpatentable over Garcia and Lenz.

We REVERSE the Examiner's decision to reject claims 9 and 21 under 35 U.S.C. § 103(a) as unpatentable over Garcia, Lenz, and Higbie.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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